

Claims

1. A network node in a telecommunication network,
characterized in that
5 at least two internal logical networks (N1, N2) are set up in the
network node (B-Vst), wherein a signaling connection (S1) is set up
from the second internal logical network (N2) to a network node (A-
Vst) of the telecommunication network, via which signaling
connection (S1) all signaling of the other network node (A-Vst) is
10 done, and both network nodes (A-Vst, B-Vst) have the same signaling
point code (SPCx).
2. The network node as claimed in Claim 1,
characterized in that
15 the second internal logical network (N2) has a signaling point code
SPCy which is distinct from the network node (B-Vst).
3. The network node as claimed in Claim 1 or 2,
characterized in that
20 signaling connections (S2) are set up from the first internal
logical network (N1) to other network nodes (C-Vst) of the
telecommunication network, and signaling relating to the network
node (A-Vst) which is coupled to the second internal logical network
(N2) takes place via said signaling connections (S2).
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4. The network node as claimed in one of Claims 1 to 3,
characterized in that
messages (TFP) are sent to the network node (A-Vst) which is coupled
to the second internal logical network (N2), said messages showing
30 that a destination in the first logical internal network (N1) has
failed.
5. The network node as claimed in one of Claims 1 to 4,
characterized in that
35 Routeset Test messages (RST) which are sent from the network node
(A-Vst) which is coupled to the second internal logical network

(N2) are answered with the routing information from the first internal logical network (N1).

6. The network node as claimed in one of Claims 1 to 5,
5 characterized in that
overload messages arriving at the first internal logical network (N1) from the telecommunication network are sent to the network node (A-Vst) which is coupled to the second internal logical network (N2).

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7. The network node as claimed in Claim 6,
characterized in that
overload test messages (RSCT) which are sent from the network node (A-Vst) which is coupled to the second internal logical network (N2)
15 in response to the overload message are blocked.

8. The network node as claimed in one of Claims 1 to 6,
characterized in that
the first and second internal logical networks (N1, N2) form a first
20 pair from internal logical networks, and further pairs of internal logical networks (N1-N20, N2-N19, etc.) are set up in the same way as the first pair.

9. The network node as claimed in Claim 8,
25 characterized in that
each of the internal logical networks (N1-N20) is assigned to a pair (N1-N20, N2-N19, etc.) by means of a table (T) or a mathematical algorithm.

30 10. The network node as claimed in one of Claims 1 to 9,
characterized in that
at least a third internal logical network (N3) is set up in addition to the second internal logical network (N2), wherein a second signaling connection (S1b) exists from said third internal logical
35 network (N3) to the other network node (A-Vst) in the same way as from the second internal logical network (N2), wherein

messages from the telecommunication network (S2, S3, S4) which are sent to the other network node (A-Vst) and arrive in the first internal logical network (N1) and/or messages which are sent out of the first internal network to the other network node (A-Vst) are assigned by means of a mathematical algorithm to the second internal logical network (N2) or the third internal logical network (N3) for forwarding.

11. A method for adding network nodes in a telecommunication network, characterized by the steps: setting up two internal logical networks (N1, N2) in a network node (B-Vst) of the telecommunication network and setting up a signaling connection (S1) from the second internal logical network (N2) to another network node (A-Vst) of the telecommunication network, via which signaling connection (S1) all signaling of the other network node (A-Vst) is done, wherein both network nodes (A-Vst, B-Vst) have the same signaling point code SPCx.

12. The method as claimed in Claim 11, characterized in that the network node (B-Vst) in which the two internal logical networks (N1, N2) are set up is the network node (B-Vst) which is to be added, and a signaling point code SPCy which is already known by the other network node (A-Vst) is assigned to the second internal logical network (N2).

13. The method as claimed in Claim 11 or 12, characterized in that signaling connections (S2) are set up from the first internal logical network (N1) to other network nodes (C-Vst) of the telecommunication network, and signaling relating to the network node (A-Vst) which is coupled to the second internal logical network (N2) takes place via said signaling connections (S2).

14. The method as claimed in one of Claims 11 to 13,
characterized in that
messages (TFP) are sent to the network node (A-Vst) which is coupled
to the second internal logical network (N2), said messages showing
5 that a destination in the first internal logical network (N1) has
failed.

15. The method as claimed in one of Claims 11 to 14,
characterized in that

10 Routeset Test messages (RST) which are sent from the network node
(A-Vst) which is coupled to the second internal logical network (N2)
are answered with the routing information from the first internal
logical network (N1).

15 16. The method as claimed in one of Claims 11 to 15,
characterized in that
overload messages arriving at the first internal logical network
(N1) from the telecommunication network are sent to the network node
(A-Vst) which is coupled to the second internal logical network
20 (N2).

17. The method as claimed in Claim 16,
characterized in that
overload test messages (RSCT) which are sent from the network node
25 (A-Vst) which is coupled to the second internal logical network (N2)
in response to the overload message are blocked.

18. The method as claimed in one of Claims 11 to 17,
characterized in that
30 the first and second internal logical networks (N1, N2) form a first
pair from internal logical networks, and further pairs of internal
logical networks (N1-N20, N2-N19, etc.) are set up in the same way
as the first pair.

19. The method as claimed in Claim 18,
characterized in that
each of the internal logical networks (N1..N20) is assigned to a
pair (N1-N20, N2-N19, etc.) by means of a table (T) or a
5 mathematical algorithm.

20. The method as claimed in one of Claims 11 to 19,
characterized in that
at least a third internal logical network (N3) is set up in addition
10 to the second internal logical network (N2), wherein a second
signaling connection (S1b) exists from said third internal logical
network (N3) to the other network node (A-Vst) in the same way as
from the second internal logical network (N2), wherein messages from
the telecommunication network (S2, S3, S4) which are sent to the
15 other network node (A-Vst) and arrive in the first internal logical
network (N1) and/or messages which are sent out of the first
internal network to the other network node (A-Vst) are assigned by
means of a mathematical algorithm to the second internal logical
network (N2) or the third internal logical network (N3) for
20 forwarding.